What is claimed is:

1. A method for enhancing the flux rate of a substance through a porated tissue, comprising the step of delivering an effective amount of a flux enhancer into the tissue through at least one micropore in the tissue.

2. The method of claim 1, wherein the step of delivering the flux enhancer comprises inserting a probe carrying the effective amount of flux enhancer into the tissue.

3. The method of claim 1, wherein the step of delivering the flux enhancer comprises positioning a quantity of flux enhancer adjacent the porated tissue and releasing at least a portion of the quantity of flux enhancer into the tissue through the at least one micropore.

4. The method of claim 3, and further comprising the step of applying sufficient energy to the quantity of flux enhancer to vaporize at least a portion of the quantity of flux enhancer.

5. The method of claim 4, wherein the step of applying energy to the quantity of flux enhancer comprises introducing a heated element into the quantity of flux enhancer.

6. The method of claim 3, wherein the step of positioning a quantity of the flux enhancer at the site comprises placing a carrier device having a reservoir containing the quantity of flux enhancer adjacent the porated tissue, and wherein the step of releasing at least a portion of the quantity of flux enhancer into the tissue through the at least one micropore comprises applying energy onto the carrier device to vaporize at least a portion of the quantity of flux enhancer.

7. The method of claim 1, wherein the flux enhancer contains ammonia.

8. The method of claim 1, wherein the flux enhancer contains an inflammatory mediator, a growth factor, a mast cell deregulator, an extra cellular matrix adhesion inhibitor, an enzyme, a blistering agent, food oils, anti-prurities, diuretics or capillary permeability enhancers.

9. A method of harvesting an analyte from tissue through a biological membrane, comprising steps of:

(a) porating the biological membrane to form at least one micropore;

(b) delivering an effective amount of a flux enhancer to the tissue through the micropore; and

(c) collecting a quantity of analyte through the at least one micropore.

10. The method of claim 9, wherein the micropore extends to a selected depth into or through the biological membrane.

11. The method of claim 9, wherein the steps of porating and delivering comprise inserting a probe carrying a quantity of flux enhancer into the biological membrane.

12. The method of claim 11, wherein the step of inserting a probe comprises inserting a heated probe into the biological membrane.

13. The method of claim 9, wherein the step of delivering an effective amount of a flux enhancer comprises the steps of positioning a reservoir containing a quantity of flux enhancer adjacent the surface of the biological membrane, and releasing at least a portion of the quantity of flux enhancer from the reservoir into the at least one micropore.

14. The method of claim 13, and further comprising the step of applying sufficient energy to the reservoir of flux enhancer to vaporize at least a portion of the quantity of flux enhancer.

15. The method of claim 14, wherein the steps of porating the biological membrane and releasing at least a portion of the flux enhancer comprise the step of applying a sufficient amount of electromagnetic energy onto an energy absorbing portion adjacent the reservoir to heat the energy absorbing portion to a temperature sufficient to form the at least one micropore and to vaporize at least a portion of the reservoir of flux enhancer.

16. The method of claim 14, wherein the steps of porating the membrane and releasing at least a portion of the flux enhancer comprise the step of introducing a heated element through the reservoir and into the membrane.

17. The method of claim 9, and further comprising the step of applying ultrasonic energy to the tissue to draw an interstitial fluid containing the analyte outwardly through the at least one micropore.

18. The method of claim 9, and further comprising the step of applying suction to the tissue to draw interstitial fluid comprising the analyte outwardly through the at least one micropore.

19. The method of claim 9, wherein the step of porating comprises measuring an impedance between an electrically heated probe that creates the micropore and an electrode spaced therefrom to control a depth of the micropore based on the impedance.

20. The method of claim 19, wherein the step of measuring an impedance comprises measuring a complex impedance between the electrically heated probe and the electrode.

21. A method of delivering a drug to tissue through a biological membrane, the method comprising:

(a) porating the biological membrane to form at least one micropore;

(b) delivering an effective amount of a flux enhancer to the tissue through the at least one micropore; and

(c) introducing a drug through the at least one micropore.

22. The method of claim 21, wherein the micropore extends to a selected depth into or through the biological membrane.

23. The method of claim 21, wherein the steps of porating and delivering comprise inserting a probe carrying a quantity of flux enhancer into the biological membrane.

24. The method of claim 23, wherein the step of inserting a probe comprises inserting a heated probe into the biological membrane.

25. The method of claim 21, wherein the step of delivering an effective amount of a flux enhancer comprises the steps of positioning a reservoir containing a quantity of flux enhancer adjacent the surface of the biological membrane, and releasing at least a portion of the quantity of flux enhancer from the reservoir into the at least one micropore.

26. The method of claim 25, further comprising the step of applying sufficient energy to the reservoir of flux enhancer to vaporize at least a portion of the quantity of flux enhancer.

27. The method of claim 26, wherein the steps of porating the membrane and releasing at least a portion of the flux enhancer comprise the step of applying a sufficient amount of electromagnetic energy onto an energy absorbing portion adjacent the reservoir to heat the energy absorbing portion to a temperature sufficient to form the at least one micropore and to vaporize at least a portion of the reservoir of flux enhancer.

28. The method of claim 26, wherein the steps of porating the membrane and releasing at least a portion of the flux enhancer comprise the step of introducing a heated element through the reservoir and into the membrane.

29. The method of claim 21, and further comprising the step of applying ultrasonic energy to the tissue to drive the drug into the tissue.

30. The method of claim 21, wherein the step of porating comprises measuring an impedance between an electrically heated probe that creates the micropore and an electrode spaced therefrom to control a depth of the micropore based on the impedance.

31. The method of claim 30, wherein the step of measuring an impedance comprises measuring a complex impedance between the electrically heated probe and the electrode.

32. A device for facilitating the formation of at least one micropore in a biological membrane and enhancing the rate of flux of a fluid therethrough, comprising:

(a) a reservoir containing an effective amount of flux enhancer; and

(b) an energy absorbing layer responsive to applied electromagnetic energy to form a micropore and to vaporize at least a portion of the flux enhancer for release into at least one micropore.

33. The device of claim 32, and further comprising means for affixing the device on the biological membrane.

34. The device of claim 32, and further comprising an effective quantity of a drug contained in the reservoir.

35. The device of claim 32, and further comprising means for collecting a sample of the fluid containing an analyte.

36. The device of claim 32, and further comprising a transparent cover layer overlying the reservoir.

37. The device of claim 36, and further comprising a substrate layer located between said energy absorbing layer and said transparent cover layer and defining an aperture therethrough, said reservoir of flux enhancer being disposed within said aperture and sealed between the transparent cover layer and the energy absorbing layer.

38. The device of claim 32, wherein said energy absorbing layer is treated with said effective amount of flux enhancer such that said reservoir is incorporated in said energy absorbing layer.

39. The device of claim 38, and further comprising an optically transparent layer overlying the energy absorbing layer.

40. The device of claim 32, wherein the flux enhancer is a liquid.

41. The device of claim 32, wherein the flux enhancer is a solid.

42. The device of claim 32, wherein the flux enhancer is a gas.

43. The device of claim 32, and further comprising a further reservoir containing an effective amount of a drug to be delivered.

ADD B3

ADD

B3

add C5